

# Ice Damming

## WHEN WINTER BRINGS LEAKY ROOFS

If it's the middle of winter and your roof leaks, you could be a victim of ice damming.

That's when ice collects on a portion of the roof and the snow above it melts but the ice below prevents proper drainage, creating a back-up of water. If enough water collects, it will back up under the shingles and leak into the eaves or, worse, into the wall cavities or the interior of the house.

Ice dams typically occur on low-slope roofs and tend to form over unheated areas, such as eaves, porches, attached garages. They usually happen after a heavy snow, when the temperature in the daytime is above freezing but drops to below freezing during the night.

Clearing the snow and breaking up the ice may bring temporary relief, but the most effective solutions are increased attic insulation and good ventilation of the space above the insulation. These measures will reduce the air temperature in the attic and create a "cold roof", so there will be less tendency for the snow on the roof to melt.

### MEASURES TO PREVENT ICE DAMS

Carefully seal all penetrations around light fixtures, bathroom fans, plumbing vents, electrical wires,

outlets, chimneys, attic hatches, etc. By means of foam urethane, caulking, weather-stripping or other barrier materials.

Weatherstripping applied to the edges of the attic opening and a faced glass fibre batt or rigid board insulation attached to the top of the attic door will provide an effective seal.

When re-roofing, consider protecting the eaves by applying a waterproof membrane along the eaves and in valleys. The membrane should extend two-and-a-half feet beyond the inside of the exterior wall. Provide ample and effective ventilation to quickly remove whatever heat gets through the insulation into the attic before it

has a chance to warm the roof sheathing. Cold outside air should completely wash the underside of the roof above the insulation to keep its temperature close to that of the outside air.

Heating cables are another alternative. The drawback is that they have to be turned on prior to the accumulation of snow or they can actually aggravate the situation. They can also pose a fire or shock hazard if installed or used incorrectly, or if the cables overlap or become twisted.

